

DISCUSSION OF THE CLAIMS

Claims 1-18 are active in the present application. The claims are amended for matters of form. For example, Claims 2, 3 and 7 are rewritten in independent form. The other claims are amended and/or rewritten for matters of form and/or clarity.

Support for the amendment is found in the originally presented claims.

No new matter is added.

REMARKS/ARGUMENTS

The Office rejected the previously presented claims for indefiniteness. In particular, the Office objected to the claims for the reason that the formulas recited in Claim 1 are limited only to a 1,3,5-triazine urea and exclude the 1,3,5-triazine carbamate recited in the preamble of the claim.

Applicants submit that formula (I) of Claim 1 encompasses both urea and carbamate derivatives. Applicants submit that the chemical bond connectivity of ureas and carbamates is readily recognized by those of skill in the art. For example, a carbamate unit is readily recognized as a unit of formula $A-O-C(=O)-N(R)-B$ where either or both of A and B may be a single bond connected to a further structural moiety or the R unit of the present claims. A urea unit is readily recognized as a compound of formula $A-N(X)-C(=O)-N(X)-B$ where either or both of A and B may be a single bond connected to a further structural moiety and the units X may be, for example, a hydrogen atom.

It is readily evident that carbamate derivatives are included in formula (I). The NH unit directly bonded to the triazine core of formula (I) may form the basis of a carbamate unit because it is first bonded to a carbonyl group (i.e., a $C=O$ group) which in turn is bonded to a group X^3 which may be an oxygen atom that is further bonded to a group R^3 which may be a divalent organic radical. If X^3 is an oxygen atom, the $-X^3-C(=O)-N(H)-$ unit is a carbamate unit.

As already recognized by the Office, formula (I) encompasses urea derivatives and thus the rejection of the claims for indefiniteness on the basis that only 1,3,5-triazine ureas are encompassed by formula (I) should be withdrawn. The same logic applies to the rejection of Claim 4.

The amendment to the claims is believed to obviate the rejections of Claims 7-11 as set forth in paragraph Nos. 5-7 on page 3 of the November 18, 2009 Office Action.

The Office further rejected the claims under 35 U.S.C. § 112 for lack of enablement on the ground that the specification does not enable those of ordinary skill in the art to make compounds encompassed by formulas (I)-(III) wherein the units substituting the triazine core are different. It appears that the Office is taking the position that the specification teaches only enough to make triazine derivatives which are substituted with three identical substituents. Applicants traverse the rejection for the reason that those of ordinary skill in the art readily recognize that the substitution of a triazine unit may be carried out sequentially such that a triazine unit which is substituted with different groups may be obtained.

For example, a compound such as that of formula (IV) of Claims 4 and 6 can be reacted with a first one molar equivalent of a unit that may be a amino-containing group or a hydroxyl-containing group to first form a mono-substituted triazine core. The resulting mono-substituted compound may then be subjected to further reaction with a second one molar equivalent of a different hydroxyl-containing or amino-containing compound to form a di-substituted triazine core that is substituted with two different groups. A further sequential reaction with a third one molar equivalent of a still further different hydroxyl-containing or amino-containing compound can thus be undertaken to form a tris-substituted triazine core having three substituents of different formula.

In the paragraph bridging pages 5 and 6 of the November 18 Office Action it appears that the Office implies that any reaction carried out to form the triazine carbamate and/or triazine urea of the claims must be conducted in a manner such that all of the substituent groups are simultaneously reacted with a triazine core. Nothing in the evidence of record indicates that such a reaction strategy is required or necessary. Applicants submit that those of ordinary skill in the art would readily recognize that such a strategy would be ineffective because a potentially intractable mixture of compounds would result.

Applicants submit that the rejection of the claims for lack of enablement should be withdrawn at least for the reasons explained above.

With regard to the rejection/objection to Claim 4 under 37 C.F.R. § 1.75, Applicants draw the Office's attention to the M.P.E.P. which states the following with respect to duplicate claims written in a product-by-process format.

Note, that although 37 C.F.R. § 1.75(c) requires the dependent claim to further limit a preceding claim, this rule does not apply to product-by-process claims.

See M.P.E.P. § 608.01(n)(I).

The rule described in the M.P.E.P. for dependent claims should likewise apply here for independent Claim 4. Where the subject matter of one claim differs from another claim because one of the claims is written in a product-by-process form, no objection under 37 C.F.R. § 1.75 should be made. Applicants submit that product-by-process claims are written in a manner to define a difference in scope in comparison to corresponding claims not written in a product-by-process manner. In this regard, M.P.E.P. § 706.03(k) sets forth:

Inasmuch as a patent is supposed to be limited to only one invention, or at most, several closely related indivisible inventions, limiting an application to a single claim, or a single claim to each of the related inventions might appear to be logical as well as convenient. However, court decisions have confirmed applicant's right to restate (i.e., by plural claiming) the invention in a reasonable number of ways. Indeed, a mere difference in scope between claims has held to be enough.

Here, the difference in scope between Claim 1 and 4 should be sufficient basis for the Office to determine that such claims are not duplicates of one another. Applicants respectfully request withdrawal of the rejection/objection.

On pages 9-11 of the November 18 Office Action, the Office rejected Claims 1-2 and 4-7 for obviousness-type double patenting in view of copending application 10/593,308. As a first point, Applicants submit that withdrawal of the rejection of at least Claims 1, 2, 4 and

5 is appropriate for the reason that these claims are drawn to a product. In contrast, the claims pending in the co-pending application are drawn to a process. The Office puts forth no cogent reason why the product of present Claims 1, 2, 4, and 5 are obvious in view of the process claimed in the claims of the co-pending application. Applicants submit that the rejection of Claims 1, 2, 4, and 5 for obviousness-type double patenting is untenable and should be withdrawn.

With respect to the rejection of Claims 6-8 for obviousness-type double patenting in view of the claims of the copending application, Applicants first point out that the rejection is inconsistent with the Office's position that the formulas of the present claims do not encompass a carbamate. How can the Office argue on the one hand that the formulas of the present claims do not encompass a carbamate and then, on the other hand, argue that Claims 6-8 are obvious in view of the process for preparing a 1,3,5-triazine carbamate such as that recited in Claims 21-35 of the copending application?

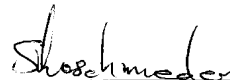
Irregardless of this inconsistency in the Office's reasoning, Applicants note that the differences in the chemical structure of the compounds of the present claims makes such a rejection untenable. For example, Claim 6 recites a triazine core substituted with units such as $-N(H)-C(=O)-O-R^4$ which the Office appears to believe corresponds with groups such as $-N(H)-Y^1$ of Claim 21 of the co-pending application. Applicants note that R^4 of present Claim 6 is a C_1-C_4 alkyl. In contrast, the group Y^1 of Claim 21 of the co-pending application may be a group of formula $-(CO)-O-R^4$ where R^4 is "the radical of an alcohol or amine". The Office provides no reasoning why a radical of an alcohol or an amine would render obvious a C_1-C_4 alkyl group. For at least this reason the obviousness-type double patenting rejection of Claims 6-8 should likewise be withdrawn.

Applicants thanks Examiner Bala for the helpful and courteous discussion of January 19, 2010. During the discussion Applicants U.S. representative argued that the rejections under 35 U.S.C. 112 should be withdrawn in view of the description of the original specification. It was also pointed out that the ODP rejection may be addressed by a terminal Disclaimer if so desired by Applicants. The Examiner noted that certain claims may be duplicates and arguments providing reasoning why the rejection should be withdrawn should be submitted with any amendment filed in response to the Office Action.

For the reasons explained above in detail, Applicants request withdrawal of the rejection and the allowance of all now-pending claims.

Respectfully submitted,

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